Claims

[c1]   A method of optimizing a product order where the product includes at least one customer-selectable component, the method comprising the steps of:

receiving the product order;

determining component information in real-time by querying a manufacturer system and, in response to a component being unavailable at the manufacturer, querying at least one supplier system in real time that can supply the component to the manufacturer; and

offering the customer at least one order option in real time based on a result of the determination.

[c2]   The method of claim 1, wherein the component information includes at least one of: component availability, component cost, component delivery lag time to the manufacturer if the component is only available from a supplier, and product delivery lag time and cost for different manufacturing sites.

[c3]   The method of claim 1, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.

[c4]   The method of claim 1, further comprising determining an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and placing an order for the unavailable component with a system of the appropriate supplier.

[c5]   The method of claim 1, further comprising the step of scheduling at least one of a product delivery schedule and a component delivery schedule with a shipper system.

[c6]   The method of claim 1, further comprising the step of determining an available manufacturing site based on at least one site factor.

[c7]   The method of claim 6, wherein the at least one site factor is selected from the group comprising: cost, component selected, proximity of a required supplier to a manufacturing site, proximity of a manufacturing site to a customer ship-to

location, a manufacturing site capacity, and existing component inventory at a manufacturing site.

[c8]   The method of claim 7, further comprising the step of confirming at least one of customer product fulfillment conditions, supplier order and ship information, and shipper scheduling.

[c9]   A computer program product comprising a computer useable medium having computer readable program code embodied therein for optimizing a product order where the product includes at least one customer-selectable component, the program product comprising:
program code configured to receive the product order;
program code configured to determine component information in real-time by querying a manufacturer system and, in response to a component being unavailable at the manufacturer, querying at least one supplier system in real time that can supply the component to the manufacturer; and
program code configured to offer the customer at least one order option in real time based on a result of the determination.

[c10]   The program product of claim 9, wherein the component information includes at least one of: component availability, component cost, component delivery lag time to the manufacturer if the component is only available from a supplier, and product delivery lag time and cost for different manufacturing sites.

[c11]   The program product of claim 9, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.

[c12]   The program product of claim 9, further comprising program code configured to
determine an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and place an order for the unavailable component with a system of the appropriate supplier.

[c13]   The program product of claim 9, further comprising program code configured

to schedule at least one of a product delivery schedule and a component delivery schedule with a shipper system.

[c14]   The program product of claim 9, further comprising program code configured to determine at least one available manufacturing site based on at least one site factor.

[c15]   The program product of claim 14, wherein the at least one site factor is selected from the group comprising: cost, a component selected, proximity of a required supplier to a manufacturing site, proximity of a manufacturing site to a customer ship-to location, a manufacturing site capacity, and existing component inventory at a manufacturing site.

[c16]   The program product of claim 15, further comprising program code configured to confirm at least one of customer product fulfillment conditions, supplier order and ship information, and shipper scheduling.

[c17]   A system for optimizing a product order where the product includes at least one customer-selectable component, the system comprising:
a customer interface module that provides a customer with a menu of component options and allows the customer to make a selection from the menu;
a component information determinator that determines, in real-time, at least one of component cost, component delivery lag time, component availability, and product delivery lag time and cost for different manufacturing sites by querying a manufacturer system and, in response to a component is unavailable at the manufacturer, querying at least one supplier system that can supply the component; and
an options generator that offers the customer at least one option in real time based on a result of the determination.

[c18]   The system of claim 17, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.

[c19]   The system of claim 17, further comprising a component order generator that determine an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and places an order for the unavailable component with a system of the appropriate supplier.

[c20]   The system of claim 17, further comprising program code configured to schedule at least one of a product delivery schedule and a component delivery schedule with a shipper system.